

29 CFR 1910.146

PERMIT REQUIRED

CONFINED SPACE ENTRY

Section C

(General Requirements)

(1) Workplace evaluated for presence of permit required confined spaces ?

(2) Danger signs / Employees informed of location and danger?

(3) Steps taken to prevent employee entry into the confined space?

(4) Written permit space entry program established?

Program available for inspection by employees / employee Reps.?

(if employer uses alternative procedures to enter permit space, answer questions on page 5, otherwise, continue with Section D)

Section D

(Permit Required Confined Space Program)

- (1)** Measures implemented to prevent unauthorized entry?
- (2)** Hazards identified and evaluated prior to employee entry?
- (3)** Means, Practices, and Procedures implemented for safe entry?
 - (i) Acceptable entry conditions specified?
 - Permit space isolated?
 - (iii) Purging, inerting, flushing, or venting to eliminate or control atmospheric hazard performed?
 - (iv) Vehicular or pedestrian barriers erected?
 - (v) Verification of acceptable conditions throughout authorized entry?
- (4)** Required equipment provided and maintained ?
 - (i) Testing and monitoring equipment provided and maintained
 - (ii) Ventilation equipment to maintain acceptable conditions?

- (iii) Communication equipment?
- (iv) Personal Protective Equipment?
- (v) Adequate lighting equipment?
- (vi) Barriers and shields?
- (vii) Ladders, adequate means of Egress and Ingress?
- (viii) Rescue and Emergency Equipment?
- (ix) Other equipment necessary for safe entry into and rescue from?

(5) Permit space conditions evaluated for entry operations?

- (i) Test space prior to entry to determine conditional
- (ii) Test conditions for duration of entry operations?
- (iii) Testing sequence correct (oxygen - combustibles - toxics)?

(6) At least one attendant provided outside of permitted space during entry operations?

(7) Means for attendant for multiple spaces to respond to emergency in one or more spaces w/o distracting the responsibility for the other spaces?

(8) Persons with active roles designated? (entrants, attendants, testers, etc.)

- (9)** System for summoning rescue and emergency services developed and implemented?
- (10)** System for preparation, issuance and cancellation of permits developed and implemented?
- (11)** Method of coordinating entry operations involving more than one employer developed and implemented?
- (12)** Methods developed for closing of space and canceling permits?
- (13)** Entry operations reviewed to assure that procedures protect employees in the confined space?
- (14)** Program reviewed annually and revised when required?

Section E

(Permit System)

- (1)** Entry permit prepared prior to entry?

(2) Permit signed by entry supervisor?

(3) Permit available to all authorized entrants? (posting, entrances)

(4) Duration of permit exceed time to complete the assigned job ?

(5) Entry terminated when:

(i) Entry operations covered by permit are completed?

(ii) A condition that is not allowed under the entry permit arises in or near the space?

(6) Canceled entry permits retained for at least one year

Problems encountered during entry noted on permit?

Section F

(Entry Permit)

Entry permit documents compliance and must identify:

(1) The permit space to be entered?

(2) The Purpose of Entry?

(3) The date and authorized duration of the entry permit

(4) Identification of entrants?

(5) Name of attendant(s)?

(6) Entry supervisors name?

(7) The hazard of the permit space to be entered?

(8) Measures used to isolate space?

(9) Acceptable entry condition?

(10) Results of initial and periodic tests

(11) Emergency & rescue services that can be summoned, the means & telephone numbers

(12) Communication procedures used by entrants.?

- Equipment such as PPE, testing equipment, communications equipment?

(14) Information on special conditions that may effect safety of entrants.?

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- Any additional permits that have been authorized for work in the space?

Section G

(Training)

(2) All affected employees received required training?

- (i) Before assigned duties in confined space?
 - (ii) Before a change in assigned duties?
 - (iii) Whenever a change occurs in the permit space that was not included in the original training?
 - (iv) Whenever there are inadequacies in employee knowledge or use of these procedures?
- (3) Employee proficiency established by training?
- (4) Certification of training by employer?

Section H

(Duties of Authorized Entrants)

- (1) Aware of all hazards faced during entry (mode, signs , symptoms & consequences of exposure)?
- (2) Aware of how to use equipment properly as required by (d)(4)?
- (3) Communicate with Attendant (need to know if evac is required)?

(4) Alert the Attendant if:

- (i) Entrant recognizes any warning sign or symptom of danger
- (ii) Entrant detects a prohibited condition

(5) Entrant knows how to exit from the permit space as quickly as possible

- (i) If an order to evacuate is given by the attendant or Entry supervisor?
- (ii) If the entrant recognizes any warning signs or symptoms of danger?
- (iii) If The Entrant detects a prohibited condition?
- (iv) If the evacuation alarm is activated?

Section I

(Duties of Attendants)

(1) Knows the hazards that Will be faced?

(2) Aware of behavioral effects of hazard exposure?

(3) Maintains accurate count of entrants & able to identify authorized entrants?

(4) Remains outside of Permit space until relieved?

(5) Maintains communication with entrants as necessary to monitor entrant's status?

(6) Monitor activities inside and outside of space to determine if it is safe for entrants to remain?

Evacuate permit space immediately under the following conditions:

(i) If the attendant detects a prohibited condition

(ii) If the attendant detects the behavioral effects of hazard exposure in an authorized entrant?

(iii) If the attendant detects a situation outside the space that could endanger the authorized entrants?

(iv) If the attendant cannot effectively and safely perform all the duties?

(7) Summons rescue and other emergency services as soon as danger is discovered?

(8) Take appropriate steps when unauthorized persons approach to enter a permit space while entry is underway?

(9) Perform non-entry rescue as specified by employer's procedures?

(10) Perform no other duties that might interfere with attendants primary duty to monitor and protect the entrants?

Section J

(Duties of Entry Supervisors)

- (1) Knowledge of hazards that may be faced upon entry
- (2) Verifies that proper entries have been made on the permit?
- (3) Terminates entry and cancels permit as required?
- (4) Verifies that rescue services are available and that means of summoning them are operable?
- (5) Removes unauthorized persons who enter or attempt to enter the permit space during entry operations?
- (6) Determine whenever permit entry operation is transferred, that entry operations remain constant and conditions remain acceptable?

Section K

(Rescue and Emergency Service)

- (1) (i) Each member of the rescue service is provided with and trained in the use of PPE and required rescue equipment?
 - (ii) Each member of rescue service is trained to performed the assigned duties?
 - (iii) Each member of rescue service must practice making permit entry rescue at least once every 12 months?
 - (iv) Each member of the rescue service must be trained in basic first aid and CPR - At least one member holding a current certification for first aid and CPR shall be available?
- (2) Off-site rescue service members must be provided with
- (i) information on hazards that may be encountered?
 - (ii) access to all permit spaces from which rescue may be necessary?
- (3) Retrieval systems shall be used whenever possible to facilitate non-entry rescue?

Section C Subparagraph 5

(Alternate Procedures)

- (5) (i) An employer need not comply with paragraphs d thru f and h thru k if:

- (A) Employer can demonstrate that the only hazard is an actual or potential hazardous Atmosphere?
- (B) The employer can demonstrate that forced air ventilation alone is sufficient to maintain the space safe for entry?
- (C) Monitoring and inspection data developed to support A and B?
- (D) Initial entry is accomplished using the requirements of paragraphs d thru k?
- (E) Determinations and supporting documents are provided to each employee who enters the permit space?
- (F) Entry into the space is performed under the terms of paragraph C(5)(9)
- (ii) Requirements to enter space under (c)(5)(I) are:
 - (A) Conditions that make it unsafe to remove cover shall be eliminated before cover is removed.
 - (B) Opening Promptly guarded by railing or temporary barrier?

(C) Internal atmosphere tested prior to entry

(1) Oxygen content

(2) Flammable gases and vapor

(3) Potential Toxic contaminants

(D) Absence of any hazardous atmosphere in space when an employee is in the space?

(E) Continuous forced air ventilation ?

(F) Periodic testing of air in space?

(G) Evacuation if hazardous atmosphere is detected

(H) Employer verifies that space is safe for entry and that all requirements under this paragraph have been met in writing.